

SCRIPTING IN MULTIPLE LANGUAGES



bit.ly/hispus_scf



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WHO AM I?

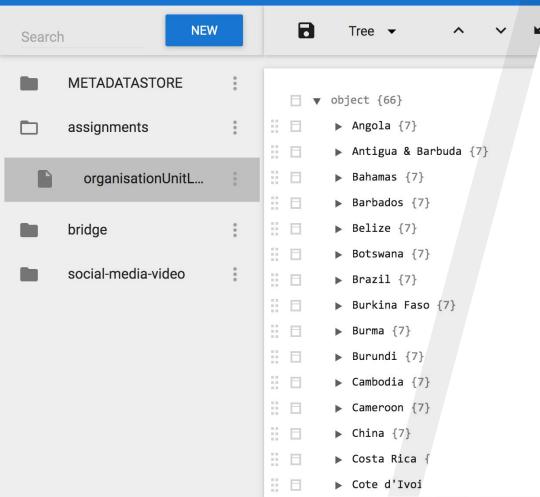
CODING EXPERIENCE

- ► Basic
- ► DOS Batch
- ► Visual Basic
- ► C++
- ► Javascript
- ► Perl

- ► PHP
- ► SQL
- ► Bash
- ► Python
- Java
- ► R

2. THE PROBLEM

dhis2



MODIFY A DATA STORE OBJECT

3. PYTHON

PYTHON CHARACTERISTICS

- ► Created in 1991
- Heightened popularity around 2004, partially due to Google
- Designed for ease of writing code and readability (e.g., semantic indenting)
- Great all-purpose programming tool

4.

R

R CHARACTERISTICS

- Created in 1993; based on S (1976)
- ► Heightened popularity in the mid-2000s
- Many statistical processes that are extremely difficult in other languages are straightforward in R
- ► Favorite language of pirates

5. JAVASCRIPT

JAVASCRIPT CHARACTERISTICS

- ► Created in 1995
- ► Popular almost immediately, as it was the main way to make webpages dynamic on the client side
- ► Based on Scheme, but has a syntax similar to Java and C++
- ► Because it was often run in unknown environments, known for platform compatibility issues
- Turned into a server-side language at the advent of nodejs in 2009

6. JAVA

JAVA CHARACTERISTICS

- ► Created in 1995
- ▶ Based on C++
- Designed to create cross-platform applications (e.g., Windows, Mac, Unix)
- Popular almost immediately
- ► Open source since 2006

7. BASH

BASH CHARACTERISTICS

- ► Created in 1989; ancestors include:
 - Bourne shell (1979)
 - Thompson shell (1975)
 - Multics (1965)
- ► Included with Linux, OS X, and even Windows
- Designed to execute commands interactively;
 not originally for scripting
- ► Is generally available but not a good idea for anything other than simple scripts

8.
SQL

SQL CHARACTERISTICS

- Created in the mid-1970s
- ▶ Became popular in the 1980s and is the most widely used database language
- ► Can be used procedurally, but often is written in single statements and used with other languages
- ► Different implementations are not fully compatible with each other

9.
CODA

FUTURE WORK

- ► Scheme
- ► Scratch
- ► Obfusticated Perl
- ▶ Piet
- ► Brainfsck
- ► Visual Basic

THANKS!

Any questions?

Contact: ben@dhis2.org

Code files on Github: bit.ly/hispus_sml